

**August 15, 2003**

Mr. Patrick Laux  
Thunderbird Products, Inc.  
2200 West Monroe Street  
Decatur, IN 46733

Re: 001-17374  
Third Significant Permit Modification to  
Part 70 No.: T 001-5903-00031

Dear Mr. Laux:

Thunderbird Products, Inc. was issued a Part 70 permit on October 14, 1999, for a fiberglass pleasure boat manufacturing facility. A letter requesting changes to this permit was received on June 4, 2003. Pursuant to the provisions of 326 IAC 2-7-12 a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of changes in the VOC limit from 250 tons per 12 consecutive month period to 244 tons per 12 consecutive month period and in the corresponding reporting requirements.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Madhurima Moulik, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (800) 451-6027, press 0 and ask for Madhurima Moulik or extension 3-0868, or dial (317) 233-0868.

Sincerely,  
Original signed by

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

**Attachments**

mm

cc: File - Adams County  
U.S. EPA, Region V  
Adams County Health Department  
Air Compliance Section Inspector - Ryan Hillman  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michele Boner

# PART 70 OPERATING PERMIT

## OFFICE OF AIR QUALITY

**Thunderbird Products, Inc.  
2200 West Monroe Street  
Decatur, Indiana 46733-3028**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T001-5903-00031	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: October 14, 1999

1<sup>st</sup> Significant Permit Modification No.: 001-11543  
1<sup>st</sup> Administrative Amendment No.: 001-11985  
1<sup>st</sup> Reopening No.: 001-13125  
2<sup>nd</sup> Significant Permit Modification No.: 001-16599

Issued on: September 18, 2000  
Issued on: October 11, 2000  
Issued on: November 29, 2001  
Issued on: January 10, 2003

3 <sup>rd</sup> Significant Permit Modification 001-17374-00031	Pages Modified: 6, 28, 30, 33, 35, 38, 40
Issued by:Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:August 15, 2003

- (g) One (1) assembly, subassembly, upholstery area, with a maximum capacity of processing 0.25 boat units per hour, and exhausting to the atmosphere.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources (fourteen space heaters H1 through H14 and two (2) gel spray booth heaters, SBH1 and SBH2) with heat input equal to or less than 10 MMBtu per hour each.
- (b) Eight (8) storage tanks with capacity less than or equal to 1000 gallons and annual throughput less than 12,000 gallons.
- (c) Cleaners and solvents characterized as follows: a) having a vapor pressure equal to or less than 2.0 kPa measured at 38 degrees C or b) having a vapor pressure equal to or less than 0.7 kPa measured at 20 degrees C.
- (d) Brazing, cutting, soldering, welding equipment and activities not resulting in HAPs emissions.
- (e) Three (3) acetone recovery systems with batch capacity less than 100 gallons.
- (f) Cut/trim, grinding, machining and wood working equipment and controlled with baghouses BH1 and BH2.
- (g) Other categories with emissions below insignificant thresholds:
  - (1) A wood/plastic working shop identified as BH3, equipped with one (1) baghouse for particulate control, with 99.95% efficiency.
  - (2) Activities related to research and development with VOC emissions below 15 pounds per day.
  - (3) Return services limited to minor patching with gel resin, paint touch-up.
  - (4) Boat cavity foam filling operations.
  - (5) Mold making and repair activities using tooling resins and gelcoats.
  - (6) Use of organic peroxide catalysts in resin and gelcoat application areas.
- (h) Paved and unpaved roads and parking lots with public access.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

- (b) It is a source in a source category designated by the United States Environmental Protection Agency (USEPA) under 40 CFR 70.3 (Part 70 Applicability).

Thunderbird Products, Inc.  
Decatur, Indiana  
Permit Reviewer: Keramida/VS

3<sup>rd</sup> Sig. Permit Mod. No.: 001-17374  
Modified By: Madhurima D. Moulk

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## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (c) Three (3) gel coating booths, identified as GSB4, GSB5, and GSB6, with a maximum capacity of 0.13 boats per hour per booth, using dry filters as control, and exhausting to stacks/vents #10, #11, and #12.
- (d) Four (4) stationary resin and foam filling booths, identified as, STB1, STB2, STB3, and STB4, with a maximum capacity of 0.005 boats per hour per booth, using dry filters as control, and exhausting to stacks/vents #13, #14, #15, and #16.
- (e) Five (5) IMRON paint spray booths, identified as, SB1, SB2, SB3, SB4, and SB5, with a maximum capacity of 0.078 boats per hour per booth, using dry filters as control, and exhausting to stacks/vents #18, #19, #20, #21, and #22.
- (f) Eight (8) lamination and foam filling areas, identified as: AV2, AV3, AV4, AV5, AV6, AV7, AV8 and AV9 with a maximum capacity of 0.13 boats per hour per area, using dry filters as control, and exhausting to stacks/vents #3, #4, #5, #6, #7, #8, #9 and #38.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

### A.1.1 Volatile Organic Compounds (VOC) - General Reduction [326 IAC 8-1-6]

Pursuant to the construction permit CP (01) 1658 issued in October 20, 1987, this source is subject to BACT requirements for VOC emissions. The current BACT requirements for fiberglass operations have been determined to be similar to the MACT determination under 326 IAC 2-1-3.4. Therefore, pursuant to the MACT determination under 326 IAC 2-1-3.4 and Construction Permit CP (01) 1658 issued in October 20, 1987, operating conditions for the fiberglass and painting operations shall be the following:

- (a) Monthly usage by weight, volatile organic content, method of application, and other emission reduction techniques for each gel coat, resin, and paint shall be recorded. Volatile organic compound emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
- (b) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, July 23, 2001, or its updates, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene

emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis. Emission factors for methyl methacrylate may be obtained from the "Unified Emission Factors for Open Molding of Composites" which allows for specific emission determinations for methyl methacrylate.

Thunderbird Products, Inc.  
Decatur, Indiana  
Permit Reviewer: Keramida/VS

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- (2) Cleanup solvent containers used to transport solvent from drums to work stations shall be closed containers having soft gasketed spring-loaded closures.
- (3) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
- (4) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
- (5) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete. The waste solvent shall be handled in such a manner that evaporation is minimized, and managed in accordance with applicable solid or hazardous waste requirements.
- (6) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.

#### D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of each month. Compliance with this condition shall be based on the conditions of D.1.1 (a) and (b).

Any change or modification which may increase VOC emissions from units listed in D.1, D.2, and D.3 to 244 tons per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), overspray shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The source shall operate the control device in accordance with manufacturer's specifications.

#### D.1.4 Preventive Maintenance Plan [326 IAC 2-7-4(c)(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Eight (8) stationary booths for gel coating/resin applications, identified as STB5 through STB12, with a maximum capacity of 0.025 boat units per hour per booth, each using dry filters as control, exhausting to stacks/vents #27, #28, #29, #30, #31, #32, #36, and #37, respectively.
- (b) Three (3) paint spray booths, identified as SB6, SB7, and SB8, with a maximum capacity of 0.025 boat units per hour per booth, each using dry filters as control, and each exhausting to stacks/vents #33, #34, and #35, respectively.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions).

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 New Source Toxics Control [326 IAC 2-4.1-1][326 IAC 20][40 CFR 63 Subpart VVVV]

Pursuant to the New Source Toxics Control under 326 IAC 2-4.1-1, operating conditions for the gel coating/resin stationary booths are listed below. Adherence to these conditions will also satisfy 326 IAC 8-1-6 (BACT), 326 IAC 20 and 40 CFR 63 Subpart VVVV (NESHAP for Boat Manufacturing).

- (c) Use of resins, gel coats and clean-up solvents, as well as VOC delivered to the applicators, shall be limited such that the total combined hazardous air pollutant (HAP) emissions are limited to less than one hundred (100) tons per twelve (12) consecutive month period, with compliance determined for the end of each month. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
  - (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, July 23, 2001, or its update, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is

not styrene shall be considered as styrene on an equivalent weight basis. Emission factors for methyl methacrylate may be obtained from the "Unified Emission Factors for Open Molding of Composites" which allows for specific emission determinations for methyl methacrylate.

- (d) Resins and gel coats used, including filled resins and tooling resins and gel coats, shall be limited to maximum monomer contents of 35 percent (35%) by weight for resins and gel coats or their equivalent on an emissions mass basis. Monomer contents shall be calculated on a neat basis, i.e., excluding any filler. Compliance with these monomer

Thunderbird Products, Inc.  
Decatur, Indiana  
Permit Reviewer: Keramida/VS

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- (5) All solvent sprayed during cleanup or resin changes shall be directed into containers, such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (6) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.

#### **D.2.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

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Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of each month. Compliance with this condition shall be based on the conditions of D.2.1 (a) and (b).

Any change or modification which may increase VOC emissions from units listed in D.1, D.2, and D.3 to 244 tons per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

#### **D.2.3 Particulate Matter (PM) [326 IAC 6-3-2(d)]**

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Pursuant to 326 IAC 6-3-2(d), overspray shall be controlled by a dry particulate filter, waterwash, or an equivalent control device. The Permittee shall operate the control device in accordance with manufacturer's specifications.

#### **D.2.4 New Facilities: General Reduction Requirements [326 IAC 8-1-6]**

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Any change or modification which would increase the potential to emit VOC from the paint booths (SB6, SB7 and SB8) to twenty-five (25) tons per year or more, shall obtain prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 8-1-6.

#### **D.2.5 Preventive Maintenance Plan [326 IAC 2-7-4(c)(9)]**

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A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

### **Compliance Determination Requirements**

#### **D.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)]**

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The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limits specified in D.2.2, PM limits specified in D.2.3. and HAPs limits specified in D.2.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

#### **D.2.7 Volatile Organic Compounds (VOC)**

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Compliance with the VOC content and usage limitations contained in Conditions D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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Decatur, Indiana  
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## **SECTION D.3 FACILITY OPERATION CONDITIONS**

### **Facility Description [326 IAC 2-7-5(15)]**

- (a) One (1) assembly, subassembly, upholstery area, with a maximum capacity of processing 0.25 boat units per hour, and exhausting to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions).

### **Emission Limitations and Standards [326 IAC 2-7-5(1)]**

#### **D.3.1 Volatile Organic Compounds (VOC) - General Reduction [326 IAC 8-1-6]**

Pursuant to 326 IAC 8-1-6, the source shall comply with the following best available control technology (BACT) determination:

- (a) The VOC content of the adhesives and sealants applied shall not exceed 9.5 pounds per gallon less water;
- (b) The total VOC input to the assembly, subassembly, upholstery area operations, including any cleanup solvents, shall not exceed 55.9 tons per twelve (12) consecutive month period, with compliance determined for the end of each month.
- (c) Proper equipment cleanup and maintenance shall be performed, including containment of any solvent used during equipment cleanup. Such containers shall be closed as soon as cleanup is complete, and any waste solvent shall be disposed of in such a manner that minimizes evaporation.

#### **D.3.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]**

Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of each month. Compliance with this condition shall be based on the conditions of D.3.1 (a) and (b).

Any change or modification which may increase VOC emissions from units listed in D.1, D.2, and D.3 to 244 tons per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

#### **D.3.3 Preventive Maintenance Plan [326 IAC 2-7-4(c)(9)]**

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of



this permit, is required for this facility and any control devices.

### Compliance Determination Requirements

#### D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limits specified in D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Thunderbird Products, Inc.  
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## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Thunderbird Products, Inc.  
Source Address: 2200 West Monroe Street, Decatur, Indiana 46733-3028  
Mailing Address: 2200 West Monroe Street, Decatur, Indiana 46733-3028  
Part 70 Permit No.: T001-5903-00031  
Facility: Emission units listed in D.1, D.2, and D.3  
Parameter: VOC  
Limit: less than 244 tons per twelve (12) consecutive month period

- (a) When applying gel coats and resins, VOC emissions shall be calculated by multiplying the material usage by the appropriate emission factor based on the monomer content, method of application, and other emission reduction techniques, and summing the emissions for all gel coats and resins.
- (b) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors for the gel coat and resin applications shall be taken from the following reference approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, July 23, 2001, or its updates. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis. Emission factors for methyl methacrylate may be obtained from the "Unified Emission Factors for Open Molding of Composites" which allows for specific emission determinations for methyl methacrylate.
- (c) When applying VOC solvents other than gel coats and resins, VOC emissions shall be calculated using an emission factor of 2,000 pounds of VOC emitted per ton of VOC used.

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			

Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by:\_\_\_\_\_

Title / Position:\_\_\_\_\_

Signature:\_\_\_\_\_

Date: \_\_\_\_\_

Phone:\_\_\_\_\_

A certification is not required for this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for Significant Permit Modification to a Part 70 Operating Permit

Source Name: Thunderbird Products, Inc.  
Source Location: 2200 West Monroe Street, Decatur, IN 46733-3028  
County: Adams  
Part 70 Permit No.: 001-5903-00031  
Permit Modification No.: 001-17374  
SIC Code: 3732  
Permit Reviewer: Madhurima D. Moulik

On July 10, 2003, the Office of Air Quality (OAQ) had a notice published in the Decatur Daily Democrat, Decatur, Indiana, stating that Thunderbird Products, Inc. had applied for a Significant Permit Modification relating to the operation of a fiberglass pleasure boat manufacturing facility. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On August 4, 2003, Thunderbird Products, Inc. submitted comments on the proposed Significant Permit Modification. The summary of the comments and corresponding responses is as follows (~~strikeout~~ to show deletions and **bold** to show additions):

(1) Comment:

In section A.3(g)(5), the source requested that the reference to specific tolling products be changed to "tooling resins and gelcoats" due to slight variations in tooling products used. Also in section A.3, source requested the addition of separate category for organic peroxide catalyst usage, since this activity occurs in all areas of resin and gelcoat application.

Response:

A.3(g)(5) is modified as follows:

- (5) Mold making and repair activities using ~~Artool 2001 and Polyite 33-451-00~~ tooling resins **and Tangerine** tooling-gelcoats, ~~and organic peroxide catalysts.~~
- (6) **Use of organic peroxide catalysts in resin and gelcoat application areas.**

(2) Comment:

Response:

The references are modified as follows:

- (A) D.1.1 Volatile Organic Compounds (VOC) - General Reduction [326 IAC 8-1-6]
- (b) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, **OAQ OAM: "CFA Emission Models for the Reinforced Plastics Industries", "Unified Emission Factors for Open Molding of Composites",** Composites Fabricators Association, ~~February 28, 1998~~, **July 23, 2001**, or its updates, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
- (B) D.2.1 New Source Toxics Control [326 IAC 2-4.1-1][326 IAC 20][40 CFR 63 Subpart VVVV]
- (a) Use of resins, gel coats and clean-up solvents, as well as VOC delivered to the applicators, shall be limited such that the total combined hazardous air pollutant (HAP) emissions are limited to less than one hundred (100) tons per twelve (12) consecutive month period, with compliance determined for the end of each month. Compliance with this limit shall be determined based upon the following criteria:
- (1) .....
- (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors shall be taken from the following reference approved by IDEM, **OAQ: "CFA Emission Models for the Reinforced Plastics Industries", "Unified Emission Factors for Open Molding of Composites,"** Composites Fabricators Association, ~~February 28, 1998~~, **July 23, 2001**, or its update, and shall not exceed 32.3% styrene emitted per weight of gel coal applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations,
- (C) Part 70 Quarterly Report
- Limit: less than 244 tons per twelve (12) consecutive month period
- (a) When applying gel coats and resins, VOC emissions shall be calculated by multiplying the material usage by the appropriate emission factor based on the monomer content, method of application, and other emission reduction techniques, and summing the emissions for all gel coats and resins.
- (b) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA - approved form, emission factors for the gel coat and resin applications shall be taken from the following reference approved by IDEM, **OAQ: "CFA Emission Models for the Reinforced Plastics Industries", "Unified Emission Factors for Open Molding of Composites", Composites Fabricators Association, February 28, 1998 (updated as the "Unified Emission Factors for Open Molding of Composites" ("CFA Factors", April 1999) July 23,**

**2001, or its updates.** For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis. Emission factors for methyl methacrylate may be obtained from the "Unified Emission Factors for Open Molding of Composites" which allows for specific emission determinations for methyl methacrylate.

# **Indiana Department of Environmental Management Office of Air Quality**

## **Technical Support Document (TSD) for a Significant Permit Modification to a Part 70 Operating Permit**

### **Source Background and Description**

<b>Source Name:</b>	<b>Thunderbird Products, Inc.</b>
<b>Source Location:</b>	<b>2200 West Monroe Street, Decatur, IN 46733-3028</b>
<b>County:</b>	<b>Adams</b>
<b>SIC Code:</b>	<b>3732</b>
<b>Operation Permit No.:</b>	<b>T001-5903-00031</b>
<b>Operation Permit Issuance Date:</b>	<b>October 14, 1999</b>
<b>Permit Modification No.:</b>	<b>001-17374</b>
<b>Permit Reviewer:</b>	<b>Madhurima D. Moulik</b>

The Office of Air Quality (OAQ) has reviewed a modification application from Thunderbird Products, Inc. relating to the operation of a fiberglass pleasure boat manufacturing facility.

### **Explanation of Modification**

The source has requested that the current PSD Minor limit of 250 tons per year for significant emission units at the source be modified to 244 tons per year. The reason for this request is that the source includes insignificant emission units such as mold making and repair activities with small amounts of VOC and HAP emissions. In this significant permit modification, the PSD Minor limit will be set to 244 tons per year for the main emission units. In addition, the insignificant activities will be included in the facility description.

### **Justification for the Modification**

The Part 70 Operating permit is being modified through a Part 70 Significant Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(d)(1), which states that a significant permit modification can be used for "Part 70 permit modifications that do not qualify as minor permit modifications or as administrative amendments". According to 326 IAC 2-7-12(b)(1)(C), a minor permit modification cannot be used for modifications that "change a case-by-case determination of an emission limit or other standard". Therefore, a significant permit modification will be issued for a modification of the PSD minor limit.

### **Recommendation**

The staff recommends to the Commissioner that the Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 4, 2003, with additional information received on June 24, 2003.

CHANGES TO PART 70 PERMIT

(1) Section A.3 is modified as follows (~~strikeout~~ to show deletions and **bold** to show additions):

A.3 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities ~~which are specifically regulated~~, as defined in 326 IAC 2-7-1(21):

(g) Other categories with emissions below insignificant thresholds:

- (1) A wood/plastic working shop identified as BH3, equipped with one (1) baghouse for particulate control, with 99.95% efficiency.
- (2) Activities related to research and development with VOC emissions below 15 pounds per day.
- (3) Return services limited to minor patching with gel resin, paint touch-up.
- (4) Boat cavity foam filling operations.
- (5) **Mold making and repair activities using Arotool 2001 and Polylyte 33-451-00 tooling resins, Tangerine tooling gelcoat, and organic peroxide catalysts.**

(2) Condition D.1.2 is modified as follows:

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

~~Pursuant to PC (01) 1658, issued on October 20, 1987, the entire source shall be limited to less than 250 tons of VOC emissions per twelve consecutive month period, with compliance determined for the end of each month. This limitation includes equipment listed in sections D.1, D.2 and D.3.~~  
**Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of each month.** Compliance with this condition shall be based on the conditions of D.1.1 (a) and (b).

Any change or modification which may increase ~~source-wide~~ VOC emissions **from units listed in D.1, D.2, and D.3 to 250 244 tons** per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(3) Condition D.2.2 modified as follows:

D.2.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

~~Pursuant to PC (01) 1658, issued on October 20, 1987, the entire source shall be limited to less than 250 tons of VOC emissions per twelve consecutive month period, with compliance determined for the end of each month. This limitation includes equipment listed in sections D.1, D.2 and D.3.~~  
**Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of**

**each month.** Compliance with this condition shall be based on the conditions of D.2.1 (a) and (b).

Any change or modification which may increase ~~source-wide~~ VOC emissions **from units listed in D.1, D.2, and D.3** to ~~250~~ **244** tons per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(4) Condition D.3.2 is modified as follows:

D.3.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

~~Pursuant to PC (01) 1658, issued on October 20, 1987, the entire source shall be limited to less than 250 tons of VOC emissions per twelve consecutive month period, with compliance determined for the end of each month. This limitation includes equipment listed in sections D.1, D.2 and D.3.~~  
**Emission units listed in sections D.1, D.2, and D.3 shall be limited to 244 tons of VOC emissions per twelve consecutive month period, with compliance determined at the end of each month.** Compliance with this condition shall be based on the conditions of D.3.1 (a) and (b).

Any change or modification which may increase ~~source-wide~~ VOC emissions **from units listed in D.1, D.2, and D.3** to ~~250~~ **244** tons per 12 consecutive month period, or greater, shall require OAQ approval before such change can take place.

Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

(5) The Part 70 Quarterly Report is modified as follows:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name:	Thunderbird Products, Inc.
Source Address:	2200 West Monroe Street, Decatur, Indiana 46733-3028
Mailing Address:	2200 West Monroe Street, Decatur, Indiana 46733-3028
Part 70 Permit No.:	T001-5903-00031
Facility:	<del>entire source.</del> <b>Emission units listed in D.1, D.2, and D.3</b>
Parameter:	VOC
Limit:	less than <del>250</del> <b>244</b> tons per twelve (12) consecutive month period

**Conclusion**

This permit modification shall be added to the conditions of the Part 70 permit as Significant Permit Modification No. 001-17374-00031.